BOOK REVIEWS

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PROGRESS IN SURGERY. Vol. 6. Edited by M. Allgöwer. 120 pp., \$12.30. S. Karger, New York, 1968. This is the sixth volume of Progress in Surgery; since the previous volumes Doctor Allgöwer has introduced Professor Roy Calne, Dr. Sven-Erik Bergentz, and Dr. Ulrich Gruber as co-editors.

The present volume contains three review articles: (1) "Liver surgery" by S. Bengmark; (2) "Thoracic transposition of the spleen" by H. H. Gruenagel; and (3) "Fat embolism" by S.-E. Bergentz. These sections will be reviewed independently.

The section on liver surgery by Doctor Bengmark includes a wide area in this extensive field of surgery in 48 pages and contains in addition an 11-page bibliography. In this limited space the author has taken on an almost impossible task because he has covered liver regeneration, anatomy, operative indications and techniques, metabolism, and sundry other subjects. In review, it might have been wise to omit areas such as anatomy and operative techniques which are available elsewhere in standard references. At any rate, there is a tremendous amount of material included which results in a rather staccato style of presentation in areas which are touched on so briefly that the text amounts to a little more than bibliographical coverage. Some areas of current interest, such as liver transplantation, have been omitted entirely. The approach to other areas in liver surgery provide a fresh viewpoint for the American reader since many European authors are brought into stronger focus than they might be in reviews written on this side of the Atlantic. For example, the section on hepatic dearterialization for diffuse tumors includes a number of extremely interesting references and brings into prominence a relatively fresh approach to the difficult problem of malignant disease of the liver. Complicated metabolic changes associated with major resection of the liver are very lightly treated, and a deeper penetration into this area might have been substituted for the now well standardized section on operative technique. Certainly, the section as a whole is well worth reading and reflects Doctor Bengmark's long standing interest and knowledge in the field of liver surgery.

In a second section, 18 pages and an extensive bibliography have been devoted to the subject of thoracic transposition of the spleen and splenopneumorrhaphy in portal hypertension. This report is on clinical and experimental studies. It provides interesting reading as another effort to approach the difficult problems of portal hypertension. In terms of clinical application, this approach may well be controversial and really represents another variant on an omentopexy or scarification of the superior surface of the liver as well as other ingenious efforts to divert portal systemic collaterals away from the esophageal varices. Doctor Gruenagel presents a strong case for this approach, however, and surgeons interested in portal hypertension should be interested in the information presented.

The section on fat embolism by Doctor Bergentz analyzes a subject which is much more limited and easier to encompass than the section on liver surgery for example and provides a very complete and well analyzed review of the information available in this confusing area. Certainly, it is clear that the clinical syndrome which has been attributed to fat embolism, including pulmonary, cerebral, and renal changes, is confused because of all of the complex disorders which occur after any severe injury. The Peltier theory that the disorder is due to the release of free fatty acids with attendant disruption of capillary endothelium, hemorrhages, and serosanguineous exudation in the lungs leading to impaired pulmonary function and associated with intravascular hemolysis is well reviewed and analyzed. In summation, after a review of all of the clinical and experimental evidence available, it implies that the clinical syndrome of fat embolism cannot be diagnosed on the basis of intravenous fat globules alone. Emphasis is placed on the nonspecificity of symptoms in the clinical syndrome of fat embolism and the concurrent existence of microthrombi, platelet aggregates, small infarcts, and widespread areas of atelectasis. Doctor Bergentz prefers to view the syndrome as one of polyetiological disease and would agree that the treatment by heparin is the only logical approach to a complex and still confusing problem.

The sixth volume of *Progress in Surgery* is a very readable and worthwhile contribution to the surgical literature.

WILLIAM V. McDERMOTT, JR., M.D.

STRESS AND DISEASE. Ed. 2. By Harold G. Wolff as revised and edited by Stewart Wolf, M.D., and Helen Goodell, B. S. 277 pp. Charles C Thomas, Publisher, Springfield, Ill., 1968.

For more than two decades Harold Wolff was Professor of Neurology at Cornell University Medical College. However, he was a good deal more than a clinical neurologist. He was a man with an intense and inquiring mind, and with a broad interest in all of the problems of human health and disease. Early in his career he turned his attention to vascular headaches, and then to many other forms of bodily disease—with perhaps a special emphasis on the diseases of the gastrointestinal tract. He saw much of human disease as an outgrowth of men's relation to the world in which they live. In 1953 he published a little volume called Stress and Disease which summarized his observations and ideas. Now this volume has been revised and brought up to date by Stewart Wolf and Helen Goodell, two of his most devoted associates.

Harold Wolff was a man of the first half of the 20th century. Although much of his work was published after World War II, his major ideas were formed before the war. He was a pupil of Pavlov and of Adolph Meyer. His thinking was influenced by Walter Cannon, and-although he would have been very unhappy to hear it said—by the dynamic psychiatrists. Although he sometimes spoke of his investigations as being concerned with the role of the central nervous system in bodily disease, he described his concepts in terms of the mind-body considerations of psychosomatic medicine. He liked to speak of the symbolic meaning of certain kinds of behavior, or of certain patterns of organ function. As an intervening variable between the mind and the body, he invoked "life-stress" to explain how mental processes led to bodily disease. In developing the concept of "lifestress" he drew upon the concept of the "state of stress" that had been postulated by Walter Cannon some years previously, and which was being elaborated also by Hans Selye contemporaneously with Wolff.

Wolff never did achieve an adequate operating definition of "life-stress"—possibly because the concept is not really suited to explain the processes that go on in a highly ordered living system. There was no adequate definition of the term in the first volume of his work, nor is there one in the present edition. "Stress" is described generally as "a dynamic state within an organism in response to a demand for adaptation," and it is said that this state is often evoked by stimuli or situations that are perceived as "threatening" or "noxious." How the state is identified or measured is left unsaid.

However, conceptions were not the forte of Harold Wolff, despite his fascination with them. His strength lay in bright ideas, followed by rather simple experiments which suggested that these ideas could well be correct. He had many bright ideas about how the function of internal organs might be influenced as the emotions of people change and as they react to their surroundings. Over the course of two decades, he and his students provided many demonstrations of changes in the functions of a variety of organ systems and of alterations in a number of metabolic processes as people were exposed to "stress interviews," or as they encountered the changing circumstances of their daily lives. In clinical studies, primarily of a "life history" nature, Wolff and his students strove to demonstrate the relevance of these phenomena to disease.

The core of Wolff's contribution lies in these expository demonstrations. They bring to the fore many considerations about the clinical course of disease, which are unappreciated by as many physicians today as they were 20 years ago. Anyone who is called upon to deal with human patients over a period of time should be aware of the phenomena that Wolff and his colleagues have described, whether or not he wishes to accept their formulations about the pathogenesis of disease, or of the effectiveness of certain forms of psychotherapy in controlling its course. This is an especially valuable body of knowledge for the clinical gastroenterologist, for many of the disorders of the gastrointestinal tract are notoriously variable in their course, and clearly these variations are to some extent associated with the patient's changing reaction to the world in which he lives.

LAWRENCE E. HINKLE, JR., M.D.

The Liver and Bile Metabolism. By *Tom Hargreaves*. 396 pp., \$18.00. Appleton-Century-Crofts, Division of Meredith Corporation, New York, 1968.

Ability to bridge the gap between fundamental research and clinical medicine is a difficult art, involving prodigious knowledge of both fields and an unerring sense of balance. For the researcher and the scientifically minded physician, this book represents a very commendable contribution.

The chapters on bilirubin and drug metabolism, the action of hepatoxic agents and the excretory mechanism of endogenous "cholephils" contain an up-to-date and very readable contribution to the knowledge of the liver function and pathology.

The pages dedicated to pathways of hemoglobin degradation are of great interest to the hematologist; the pages on enzymes and liver tests are of equal importance to the clinical pathologist and the clinician. Over 1500 references, most of them very recent, represent not the least contribution.

In general, however, the book is oriented more to the researcher than to the clinicians, although intended for both. Thus, gallstones, responsible for a good portion of liver ailments, are taken care of in less than three pages; but 45 pages are dedicated to experimental hepatic injury, mostly based on ani-